DOCUMENT RESUME

ED 156 286 JC 780 383

AUTHOR Reinertson, Jacquelyn
TITLE The Problems of Literacy in the Community College.
PUB DATE Mar 78
NOTE 40p.

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS *College Freshmen; Community Colleges; Educationally Disadvantaged; Elective Courses; Grade Equivalent Scores; Institutional Research; *Junior Colleges; Junior College Students; *National Norms; Program Effectiveness; Reading Achievement; *Reading Level; Reading Tests; *Remedial Reading Programs
IDENTIFIERS Charles Stewart Mott Community College MI

ABSTRACT

The instructional reading levels of students enrolled at Charles Stewart Mott Community College, a large urban institution with an open door policy, were investigated for 1971-72 through 1977-78. The study was based on the hypothesis that mean average reading levels in reading improvement classes declined over those years. All students entering the college took reading placement tests and after seeing their scores, could elect remedial courses; in spring 1972, 4.75% and in fall 1977, 5.39% of the students elected to take reading. The reading scores of all entering students for the study period were compared, the improvement of remedial students was noted, and comparisons with national norms were made. The mean of the approximate grade-level reading scores for the college's remedial students were 10.7 in 1972 and 9.9 in 1977. Students gained approximately two years overall above their entering scores as a result of participation in the sixteen-week remedial course; the mean gain was 2.17 years in 1972 and 1.96 in 1977. Generally, students reading at college level when entering the college, who elected to take reading, nearly doubled their reading speed and improved their vocabulary and comprehension scores substantially. The college findings seemed to agree with national trends. (TR)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED156286

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Jacquelyn Reinertson

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

THE PROBLEMS OF LITERACY IN THE COMMUNITY COLLEGE

--Jacquelyn Reinertson--

Committee:

Calvin O. Dyer
M. Clemens Johnson
Donale E. P. Smith

March, 1978

For the fulfillment of the research requirement in the Educational Psychology Program

JC 780 383

ABSTRACT

THE PROBLEMS OF LITERACY IN THE COMMUNITY COLLEGE

Reinertson, Jacquelyn M.

78 32p

This project was designed to investigate the instructional reading-levels of students enrolled in a large urban community college with an open-door policy for the school years 1971/72 through 1977/78. It was hypothesized that the mean reading-level of students in reading-improvement classes has declined during those years, in as much as that trend is evident in National Assessment,ACT,and SAT scores.

Instructional reading levels of an average of 169 students per year (total N=1013) is plotted over six years. The mean reading-level in 1971/72 was 10.11; in 1977/78 it was 8.45. The mean gain in reading-level scores after a 16-week reading course was 2.17 in 1972 and 1.96 in 1977.

The article cites the reading-diagnosis process at Mott Community College and other relevant research from two-year colleges.

TABLE OF CONTENTS

	Page
List of Tables	iii
List of Figures	iv
Statement of the Problem	1
The Community College Student as a Reader: Other Research	2
The Population	7
Procedure and Data	16
Anaylsis	20
Conclusions	28
Generalizing Findings	29
List of References	31

LIST OF TABLES

Table		Page
1	Student Income Sources	11
2	Reading Central Tendencies for Entering Students at Mott Community College Fall 1975	12
3	Comparative Data from Sparse National and Local Studies	14
4	Age Distribution	15
5	Central Tendencies of Instructional Reading Scores 1972 through 1977	20
6	Student Success and Persistence	22
7	Overall Gains in a 16-Week Course for Entering Students Reading Below College Level (Remedial Classes) Fall 1972	25
8	Overall Gains in a 16-Week Course for Entering Students Reading at College Level Fall 1972	26
9	Overall Gains in a 16-Week Course for Entering Students Reading Below College Level (Remedial Classes) Fall 1977	27
10	Overall Gains in a 16-Week Course for Entering Students Reading at College Level Fall 1977	28

LIST OF FIGURES

Figure		Page
1	Student Age Distribution Fall 1974.	8
2	Comprehension Scores for Entering Students Fall 1975.	13
3	Vocabulary Scores for Entering Students Fall 1975	13
4	Central Tendencies of Reading Grade-Level Scores Over Seven Years 1971-1972 through 1977-1978.	18
5	Instructional Reading Levels of Students Entering a Reading Improvement Course Fall 1972-Fall 1977.	19
6	Reading Achievement of Mott Community College Entering Students as Predictors of Success in Meeting Literacy Requirement Levels . . .	23

STATEMENT OF THE PROBLEM

The reading ability of adults seems to be declining in this country. Scores on national college entrance exams, such as the ACT and SAT, have declined in the past few years (NAEP 1976). Based on the National Assessment Reports of 1971 and 1975, the reading performance of 17-year olds indicates that more than 21% of those students from disadvantaged urban areas and nearly 42% of black students are functionally illiterate (1976). According to a 1975 study sponsored by the United States Office of Education, one-fifth of the nation's adult population is functionally incompetent, deficient in the basic skills required for parenthood, work, and citizenship (Gonder 1976). The 1974 Mini-Assessment of the Right to Read Effort concluded that adults from large cities read below the national average, adults in the urban fringes (suburbs) read above the national average, and adults from small- and medium-sized cities read at the national average reading level (NAEP 1976).

Community college students are neither typical college-bound students, nor typical 17-year olds. Studies show they tend to be somewhat more representative of the general adult population than are other college students. What has happened to the reading scores of community college students in the past six years? Do they follow the national trend?

This project was designed to investigate the instructional reading levels of students enrolled in a large urban community college with an open-door policy for the school years 1971/72 through 1977/78. It was hypothesized that the mean average reading level of students in reading improvement classes had declined during those years. That hypothesis is based on the

knowledge of various national and local achievement results, the increased number of handicapped enrollees, the increased number of students learning English as a second language, and the day-to-day observation that informal assessments are identifying a greater number of elementary instructional reading levels among students.

In addition to the reading levels, findings will include percentages of students who reached the objectives required for passing the sixteen-week reading improvement course, the percentages of those who did not reach those objectives, and the percentages of those who did not finish the course.

THE COMMUNITY COLLEGE STUDENT AS A READER: OTHER RESEARCH

Inasmuch as this project was concerned with current reading research about community college students, the literature search was restricted to recent studies. Utilized in that search was Research in Education Indexes (ERIC) for 1976 and 1977 under the descriptors: Community Colleges, Junior Colleges, Reading Centers, Reading Programs, Reading Research, Reading Level, Reading Development, Reading Improvement, and Reading Programs. The Current Index to Journals in Education was searched in exactly the same manner with exactly the same parameters. Other sources were used and are listed in the bibliography.

There is little reading reasearch being done in community colleges. Most of the current, published research involves lists of demographic information including age, race, gender, aspirations, previous academic achievements, work loads, income and financial arrangements--basically data that is requested on forms and collected by computers. Fewer articles cite reading-level scores for college students and there are practically no data on progress, as measured by standardized tests, nor attrition. Only two or

three authors have attempted to explain this scarcity of information from two-year colleges.

The literature indicates that community college students are more representative of the general population than are other students in higher education. They come from all segments of the socio-economic scale, tend to be uncertain of their career choices, are inclined to be practical and vocationally oriented, yet express interest in a four-year degree. Most of the students hold jobs or need financial assistance. They represent a wide age range and racial diversity. They tend to be labeled marginal or high-risk students and need some form of remedial assistance (Ahrendt 1975). Cross (1975) describes this "new student" as "one who avoids work, reads little, seems passive and incurious, needs a great deal of structure and reinforcement, and seems to lack communication skills."

In 1973 there were over 1,000 community or open-door junior colleges. In 1975, 68,238 students in 100 public two-year colleges participated in the Comparative Guidance Program. The national data from that program indicates that the two-year student population is 53% female and 46% male, and 1% unspecified; that 44% of the students entered college directly from high school. Nationally, 64% of the students are white, 20% are black, and 2% are Puerto Rican; 70% are unmarried and 67% are in occupational curricula. Fifty-three percent of the students live at home with their parents; 13% commute 21 miles or more to school, 35% commute 11 miles or more and 31% live within five miles of their college.

Seventy-five percent of community college students work and 16% of those work over 30 hours a week; only 18% are unemployed. Listed below is the family income for those students:

16% receive $5,999 or less per year

30% receive between $6,000 and $13,499 a year

26% receive $13,500 or more per year

Twenty-eight percent of the sample refused to answer the family income question, which is a problem cited throughout the research. Community college students return about half the questionnaires distributed and then refuse to answer a number of the items. One must be cautious about interpreting these sort of data.

Nationally, 23% of community college students receive public assistance (26% of females and 21% of males), while 64% receive financial aid or work part time. Twenty-four percent of their parents are non-skilled or semi-skilled workers. Twenty-three percent of their fathers and 34% of their mothers earned a high school diploma.

These students report that when they were in high school, 36% of them were "A" or "B" students; 41% say they were "C" students. Only 3% report they were less than average students and 20% did not respond to the question. These students also say they chose a community college because it was close to home and was less expensive than other schools. Seventeen percent of them chose a community college because it had the program they wanted. Twenty-seven percent of those responding aspired to a four-year degree and 27% wanted a two-year degree (Alfred 1976).

Other interesting statistics include the fact that one-third of all students entering college nationally use the "open door." The average age of the community college student is approaching thirty. There are 410,000 older women and mothers returning to college. Also entering the open door are senior citizens and others of all ages seeking leisure activity. Sixty-six percent of the community college students want job competencies rather than degrees. The poor are attending community colleges more frequently;

they bring with them health and transportation problems, poor motivation, and restricted short-term rather than long-term goals.

The handicapped and students learning English as a second language are using community colleges. Institutions such as prisons and unemployment agencies are using community colleges for retraining purposes.

Review of current research nets few reading-level scores. In an experiment at Worcester Junior College (Causey 1955), "over three-fourths of the students placed in a special reading class were reading below a tenth-grade level." Schiavone (1977) reports that students in the reading classes at Manhattan Community College in the Fall of 1975 scored a pretest mean equivalent to approximately the seventh-grade level and a midterm mean at about the tenth-grade reading level.

John Rouche (1973) did a pilot survey in Texas. Using the Nelson-Denny Reading Test, he found the reading scores of students in community college English classes to be slightly above tenth-grade level. In remedial and developmental reading classes, the reading level span was third through twelfth grade. At the University of Minnesota, James I. Brown (1973) found 12% of the entering students reading at ninth-grade level or below.

Moore insists in Against the Odds (1970, p. 3) that, "Odds are that the high-risk student will not be any better off academically after his college experience than he was before he had the experience." With the paucity of research and the rare specification of reading level, there is obviously even less data about success or achievement criteria. Schiavone (1977) reports that 68% of Manhattan Community College reading students achieved a twelfth-grade reading criterion in 1973, but that only 55% of the students in 1975 were meeting that same criterion. Schleich (Causey 1955) reports that 75% of the students in her sample were reading below tenth-grade level

on the Iowa Silent Reading Test pretest, but that one-third were reading on a college level on the post-test.

There was only one reference to attrition rates in college reading courses. In the review of research included in the Yearbooks of the Southwest Reading Conferences (Causey 1955), it is noted that reading programs that do not offer credit lose as many as half of their students. There is also a statement to the effect that those students who attend classes more frequently and regularly make the greatest gains.

After a review of the research and literature on remedial education in public community colleges, Roueche and Kirk (1973) concluded there is a "pronounced lack of research on the effectiveness of remediation efforts in community colleges in terms of assessing academic performance, persistence, and attitudes of high-risk students." Gordon and Wilkerson (1966) noted a landslide acceptance of remedial programs but they found absolutely no effort to evaluate those courses and programs. Currently, that situation appears to be basically unchanged, but there may be reasons for that lack of research. Community College instructors teach more hours and more students than university professors. For example, instructors at Mott Community College teach 18 hours which include six classes, and a student-load maximum of 180 students. The classes are full. By comparison, the reading instructor at a university in the same city teaches 12 hours with an average student load of 150 in three lecture sections. The students at the community college are not in lecture sections, but are in a reading laboratory where each of them is working on an individual curriculum. Reading instructors in two-year colleges lack the time or the energy to conduct research; furthermore, they are seldom encouraged to do so. Roueche and Kirk wrote (1973, p. 5):

> Advocates of the community college believe it can meet the challenge of providing quality education for low-achieving, nontraditional youth by being a "teaching institution." This claim is reinforced by two-year colleges, who proudly reject the idea of instructors becoming intensely involved in the research-and-publish activity so prevalent in four-year institutions. Supporters of the community junior college take great pains to emphasize that teaching staffs in the two-year college devote full time to teaching.

Two-year colleges do not encourage research and they do expect heavy teaching schedules and student loads because they receive less state aid, less tuition money and practically no research money as compared with four-year institutions. The two-year college instructor receives less time, less encouragement, less money, and has less energy for research projects.

THE POPULATION

The findings in this project came from Charles Stewart Mott Community College in Flint, Michigan. The demographics describing age, sex, programs and other general information are from a 1974 survey including the entire student population (N = 9,630) of the Fall 1974 semester. The less general information on specific reading levels and progress comes from students enrolled in reading courses in the Fall 1972 semester (N = 168) and the Fall 1977 semester (N = 208). The college and its generalized "student" is like the national models in some respects, different in others. Mott Community College is older than most two-year colleges. It was founded in 1923. It serves a district generally coinciding with Genesee County. That area has a population of nearly a half-million people. The college serves more than 40,000 students in its academic, vocational, community services, and handicapped services programs. There is a traditional academic transfer program for those students wishing to transfer to a four-year college or university. There are 37 occupational programs and instruction for 32 apprentice/industrial and building trades.

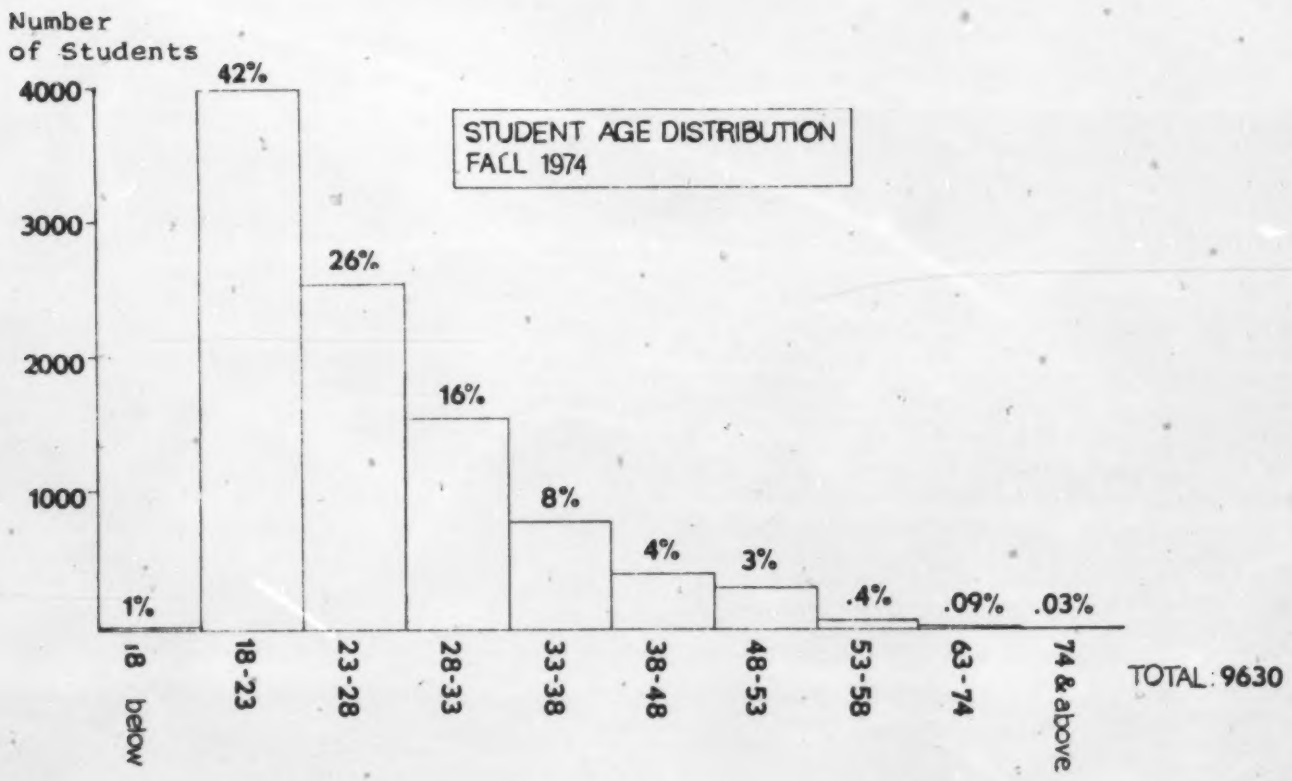
The college encourages disabled enrollees by maintaining coordinators, programs, and staff for the physically handicapped and hearing impaired.

Community Services offer residents short courses, conferences, and cultural programs, but those offerings will not be included nor discussed in this project as the courses tend to be leisure-time oriented and not academic.

The Mott Community College open-door admission policy is in The Catalog: "Admission to Charles Stewart Mott Community College is open to all high school graduates as well as to non-high school graduates 19 years of age or older."

The average age of the total student body in regularly scheduled courses is slightly over 26 years.

FIGURE 1.



Ninety-two percent of the student body comes from within the district with 55% coming directly from high school and the remainder having been out of high school one year or more. Approximately 43% come from within the City of Flint and 49% from suburban areas outside the city. A greater proportion of the city's population attends the college than do suburban residents. Forty percent of those coming from the city are from minority groups. Minority proportions of students coming from within the city have been increasing over the last four years. The total minority proportion remains relatively constant at 20% for the total student body. The minority population of the county is 17.1% of the total population.

Seventy percent of the entire labor force in the county is employed in the automobile industry or its suppliers. When auto sales slacken, blue-collar workers are laid off and enroll at the college. When the economy improves, the reverse occurs.

Veterans make up approximately 24% of the student body with most being enrolled on a full-time basis to receive maximum benefits.

The college had an enrollment of 11,000 students for Fall 1975. This is categorized as follows:

New Students	3,300 or 30%
Re-entering	1,320 or 12%
Returning	6,050 or 55%
Transfer	330 or 3%

Notice that over half of the students enrolled are those re-entering after being absent one term or more. This is a typical characteristic, with some students taking as much as five or ten years to complete the Associates Degree. The "returning student" is a continuing student--one with no school interruption.

Other statistics:

Males	48.5%
Females	51.4%
No Response	.1%
Married	38.9%
Unmarried	57.3%
No Response	3.8%

Mean number of credit hours per student -- 7.318

Students with definite career objectives	70.1%
Vocational-Technical enrollees	53.0%
Liberal Arts enrollees	47 %

Students attending Charles Stewart Mott Community College come principally from lower middle and lower class income levels. This is due to lower tuition rates ($15/credit hour), availability of student financial aid based on need, location of the college within 16 miles commuting distance from any point within the college district, and an open admissions policy.

Student income levels show that most of our students come from middle and lower income families.

TABLE 1

STUDENT INCOME SOURCES

	(11%) Full-Time Self-Supporting	(26%) Full-Time Dependent	(40%) Part-Time Self-Supporting	(23%) Part-Time Dependent
12,000	64 - 9%	439 - 26%	490 - 20%	331 - 23%
9,000-11,999	88 - 12%	272 - 16%	609 - 24%	247 - 17%
7,500- 8,999	50 - 7%	113 - 7%	284 - 12%	147 - 10%
6,000- 7,499	54 - 8%	88 - 5%	176 - 7%	92 - 6%
3,000- 5,999	158 - 22%	122 - 8%	256 - 10%	98 - 7%
2,999- below	170 - 24%	162 - 10%	205 - 8%	100 - 1%

12,000 - 21%
9,000-11,000 - 19%
7,500- 8,999 - 9%
6,000- 7,499 - 7%
3,000 - 5,999 - 10%
2,999 - below - 10%
No report - 24%

Approximately 63% of the students at Mott Community College work over 20 hours a week, while 10% work less than 20 hours a week. Twenty-six percent of the students receive financial aid of some sort.

Students entering Mott Community College take a placement test which assesses their reading, writing and mathematical skills. Students who are re-entering, students who have excellent high school records, and students who refuse to take the tests or enter too late to be tested are excluded from placement testing. Actually, the tests are administered only for guidance purposes, not admissions. Students are informed of their scores at the time they select courses. The reading test scores are expressed in approximate grade levels so that they are easily understood by the students. No one is forced to take remedial courses except students aspiring to enter the nursing programs; remedial courses are elective. Furthermore, pressure

from advisors is minimal or non-existent. Despite that lack of coercion, remedial classes at Mott Community College are numerous and filled to capacity, and many classes at desirable class hours have waiting lists.

In the Fall of 1975, 2,893 students took the reading placement test. The Cooperative English Tests: Reading Comprehension, Form B is used. The results of those tests for the general student population entering in 1975 are graphically presented on the following page in approximate grade levels.

Since a great number of students fell outside the parameters of the test range, i.e. below ninth-grade level and above college freshman level, it is impossible to designate a mean vocabulary or comprehension level, but it is possible to define the medians and modes.

TABLE 2

READING
CENTRAL TENDENCIES FOR
ENTERING STUDENTS AT MOTT COMMUNITY COLLEGE
FALL 1975

Middle comprehension score	11 grade range
Middle vocabulary score	12 grade range
Comprehension mode	13 and above
Vocabulary mode	13 and above

If we accept the numbers the researchers and as determined by the computers, we now have a somewhat distorted and overly-generalized profile of the "national community college student" and the "C. S. Mott Community College student." Being mindful of the pitfalls of research and the generalizations involved, it might nonetheless reveal something about the nature of the two-year college student if we compare that data.

Figure 2.
Comprehension
Scores for
Entering Students
Fall 1975

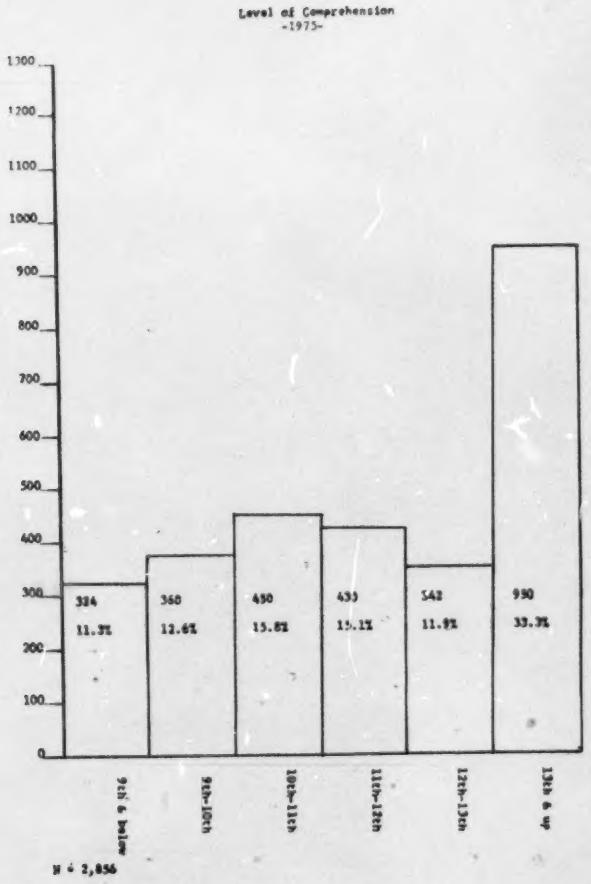
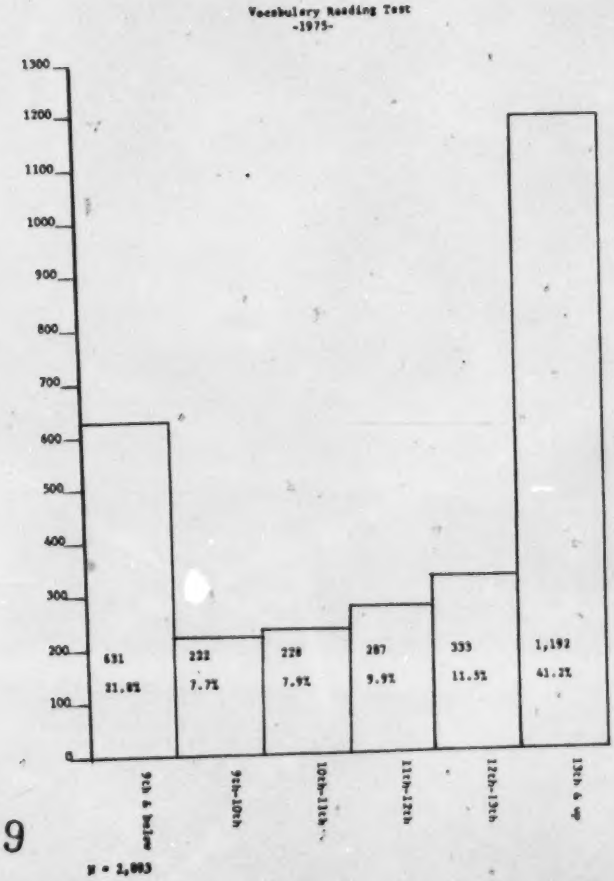


Figure 3.
Vocabulary Scores
for Entering
Students
Fall 1975



Test: Cooperative English Tests:
Reading Comprehension

TABLE 3

COMPARATIVE DATA FROM SPARSE
NATIONAL AND LOCAL STUDIES

CHARACTERISTIC	NATIONAL	LOCAL
Female	53%	51.4%
Male	46%	48.5%
Average Age	Approaching 30	26+
Black	20%	20%
White	64%	78%
Other Ethnic groups	2%	1%
Married	30%	42%
Unmarried	70%	57.3%
Vocational-occupational curriculum	67%	53%
Liberal arts curriculum		47%
Dependent (live at home)	53%	49%
Enrolled directly from high school	44%	55%
Work	75%	72.4%
Work full-time	16%	55.4%
Unemployed	18%	27.6%
Family income $5,999 or less	16%	20%
Family income $6,000-13,499	30%	56%
Family income above $13,500	26%	
No response on family income	28%	24%
Receive public assistance	23%	
Receive financial aid		25.8%
Receive financial aid or work part-time	64%	42.8%

In most respects, the Mott Community College student is similar to the generalized national profile. However, students at Mott Community College tend to be slightly younger than the national average, are more likely to enroll in college directly from high school, and more often study liberal arts. They are also more often married and working a full-time job. If they are not working, they collect financial aid, unemployment money, or work part-time more often than the "national student."

The differences make sense if one remembers that more students come to Mott Community College directly from high school and therefore keep the average age low. The age distribution is as follows:

TABLE 4

AGE DISTRIBUTION

18-23	42%
23-28	26%
28-33	16%
33-38	8%
38-48	4%
48-53	3%
53-58	.4%
63-74	.09%
74 & above	.03%

The high number of fully-employed students is a direct result of the local automobile factories which are currently operating at high capacity. The large number of students in the liberal arts field may be a consequence of the four-year university campus in our city. Transfer students to that university may attend Mott Community College for their first two years because it is far less expensive and easier to enter than the university.

The original hypothesis stated that the mean reading score of students enrolled at Mott Community College has declined over the past seven school years. One should also note that the hypothesis was based on national and local research in addition to daily diagnosis and assignment in an individualized reading center. The national and local research, such as it is, has been reviewed. The national profile has been compared with the local profile. But what of the student who elects a reading course at Mott Community College? That is the target student here.

PROCEDURE AND DATA

As has been stated earlier, students take placement tests after admission to the college. They see their scores and may elect remedial courses. In the Spring semester of 1972, 4.75% of the students elected Reading; 5.39% took Reading in the Fall semester 1977.

The graphs on the following pages depict the numbers of students reading at various levels over the past seven school years from 1971/72 through 1977/78. Five of the graphs depict Fall enrollees while two are from Spring semesters. The two Spring semester classes were chosen because the investigator was teaching a very limited number of Reading classes in the Fall semesters of those school years--usually only two sections and those tended to meet at atypical times such as Sunday afternoons. Therefore, the two Spring semesters were more similar to the Fall semesters' data used as to number of subjects, number of sections, meeting times, and so forth.

It is necessary to describe the way the reading level for each student was derived. In order to do that, the reader will learn something of diagnosis process at Mott Community College. When students come to their first Reading class, they have already taken the Reading Comprehension Subtest of

the Cooperative English Tests as a placement test. They know their scores in approximate grade levels and they have chosen the course. Diagnosis continues with an informal, group vocabulary test, the EDL Word Clues Test. The range of the Cooperative English Test: Reading Comprehension (CET) is ninth grade through college freshman levels. The range of the informal vocabulary test is seventh grade through college freshman levels. Most students fall within those ranges, but some do not. With a student age-range of at least 57 years, community college instructors expect reading levels including first grade through graduate school level.

In the classes in this study, students who scored in the very low percentiles of the CET and below the seventh-grade level of the informal vocabulary group test were individually diagnosed by the instructor using an informal reading inventory--usually the Classroom Reading Inventory by Nicholas J. Silvaroli.

After each student was diagnosed by either group or individual means, that student was assigned materials on his or her tentative instructional level. If the student was not successful on those materials, another evaluation was made, and materials were changed until the student was succeeding on the materials he or she was using. In other words, the reading levels depicted on the graphs constitute "instructional levels." They were defined by standardized and informal measures, group and individual diagnoses and finally by use, feedback, and adjustment.

The number of students for each semester ranges from 135 to 208. The number of sections varied from five to seven. Other variables tend to be constant. The environment in all cases was the Reading Center at Mott Community College, an individual carrell laboratory with a comprehensive variety of hardware and software. The instructor for all classes was the

investigator. Class times were similar each semester and all students chose their class sections. Most of the students in Reading are new enrollees, so it is likely that they chose their section for time convenience.

FIGURE 4.

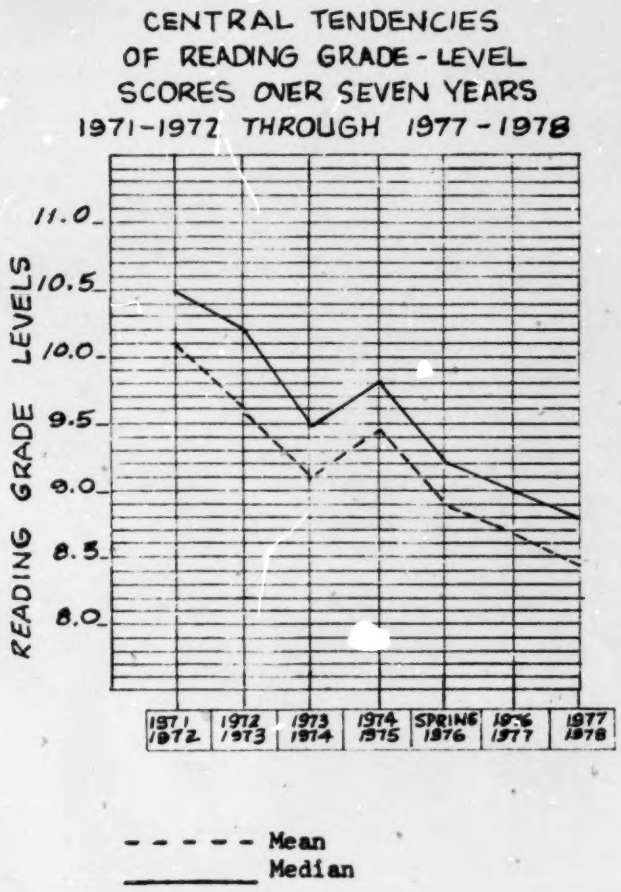
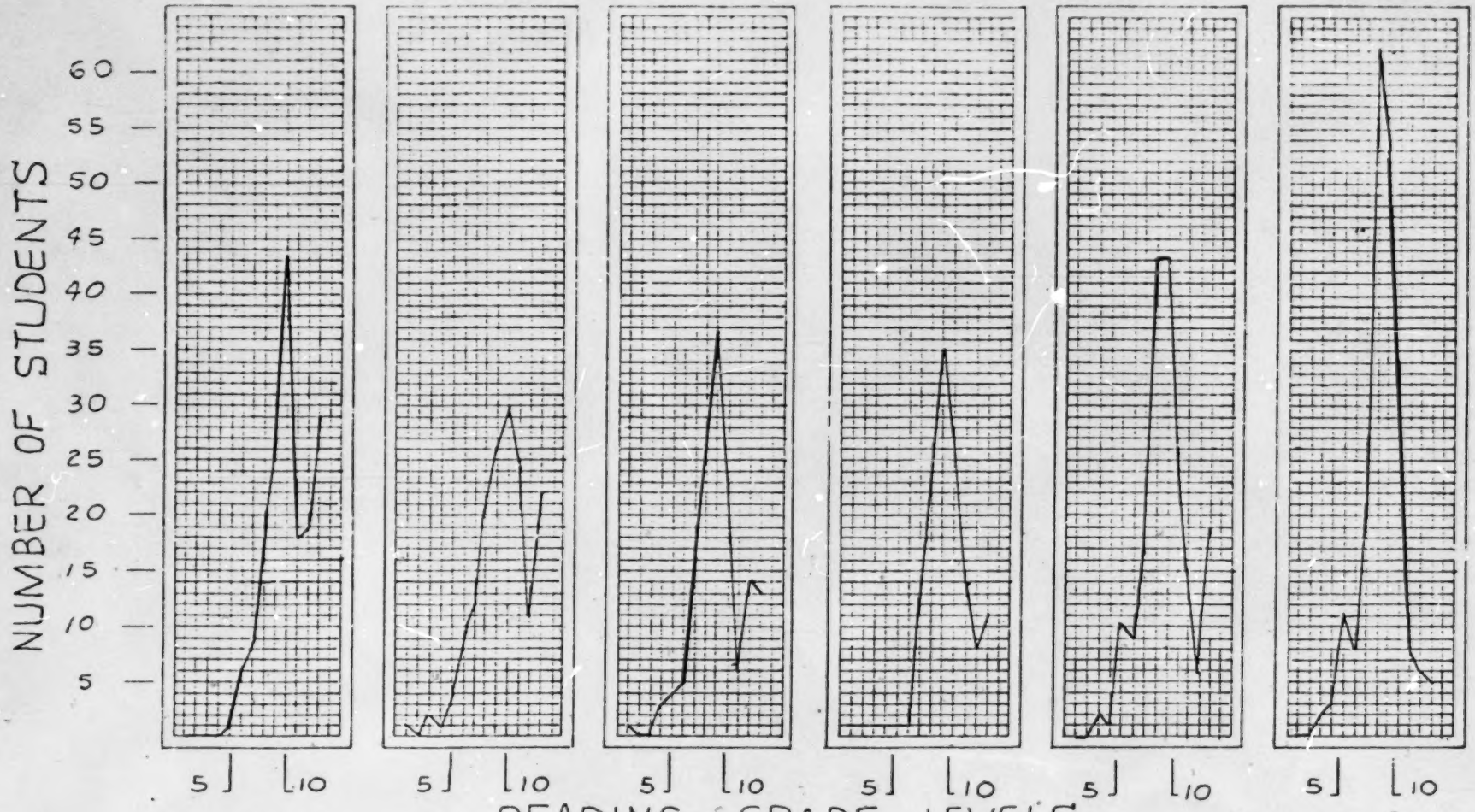


FIGURE 5.

INSTRUCTIONAL READING LEVELS OF STUDENTS ENTERING A READING IMPROVEMENT COURSE FALL 1972-FALL 1977



SPRING '72 SCHOOL YEAR 1971 - 1972	FALL '72 SCHOOL YEAR 1972 - 1973	FALL '73 SCHOOL YEAR 1973 - 1974	FALL '74 SCHOOL YEAR 1974 - 1975	SPRING '76 SCHOOL YEAR 1975 - 1976	FALL '77 SCHOOL YEAR 1977 - 1978
N = 171	N = 163	N = 147	N = 135	N = 189	N = 208
MEAN = 10.11	MEAN = 9.6	MEAN = 9.12	MEAN = 9.47	MEAN = 8.93	MEAN = 8.45
MODE = 10	MODE = 10	MODE = 9	MODE = 9	MODES = 8 & 9	MODE = 8
MEDIAN = 10.5	MEDIAN = 10.2	MEDIAN = 9.5	MEDIAN = 9.8	MEDIAN = 9.2	MEDIAN = 8.9
S. D. 2.0775	S. D = 2.0248	S. D. = 2.2085	S. D. 1.87312	S. D. = 2.17015	S. D. = 1.79946

ANALYSIS

TABLE 5

CENTRAL TENDENCIES OF INSTRUCTIONAL READING SCORES
1972 THROUGH 1977

	Mean	Median	Mode	Standard Deviations	N	Mean Difference
1971-72	10.11	10.5	10	2.0775	171	-
1972-73	9.6	10.2	10	2.0248	163	-.51
1973-74	9.12	9.5	9	2.20857	147	-.48
1974-75	9.47	9.8	9	1.87312	135	+.35
1975-76	8.93	9.2	8, 9	2.17015	189	-.54
1976-77	8.71	9.0	8	2.0248	177	-.22
1977-78	8.45	8.9	8	1.79946	208	-.26
					Average Change Per Year	-.19

The initial hypothesis that the mean reading level of students in Reading classes at Mott Community College has declined is demonstrated to be true. The mean has decreased about two (-.19) reading-level months each year--from 10.11 in 1971/72 to 8.45 in 1977/78. All other central tendencies have followed the same downward trend and continue the pattern of a curve with normal tendencies and a high right tail. Since the range of the CET is about nine through thirteen, all students who read at college freshman level and above collect in that last category. If the test range were larger, the curve would likely take on more normal tapering contours. That final category "tail" disappears by 1977/78; there is no large collection of college-level readers at that time. By 1977, most students in the

Reading classes are truly remedial with only five students reading at college freshman level. Basically, the trend throughout those graphs is for all scores to regress almost two years. The top thins out and moves down, the lower ranges move down about two years, and all central tendencies do the same. The standard deviation stays approximately the same.

There are criteria for passing Reading courses at Mott Community College. If a student's pre-test comprehension score is below the twenty-fifth percentile on the CET, that student must reach the twenty-fifth percentile on either of two successive test sessions using alternate forms of the CET in order to pass the course. That entails reading at approximately tenth-grade level. If the student's scores on the pre-test are at or above the twenty-fifth percentile for comprehension, then that student must improve upon any of his two pre-test scores (vocabulary, comprehension, or speed of comprehension) on either of two alternate forms of the CET given subsequently at approximately eight weeks and fifteen weeks into the semester. In other words, all students who pass the Reading course have comprehension scores of at least tenth-grade level. Those who read at that level when they enter must improve upon at least two aspects of their reading during the semester.

What are their chances of doing that?

There are certain tendencies apparent in the following graphs.

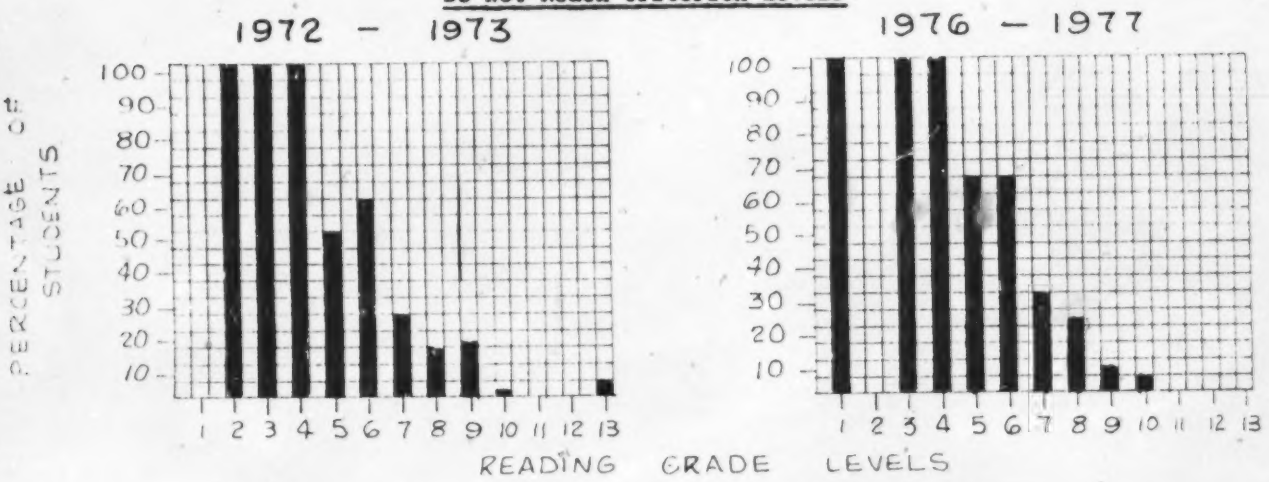
1) There are no students who begin the course with a fifth-grade reading level, or below, who score at or above the twenty-fifth percentile (approximately tenth grade) after 16 weeks of instruction.
2) A very few students (15%) who begin with sixth-grade level scores meet that criterion.

TABLE 6

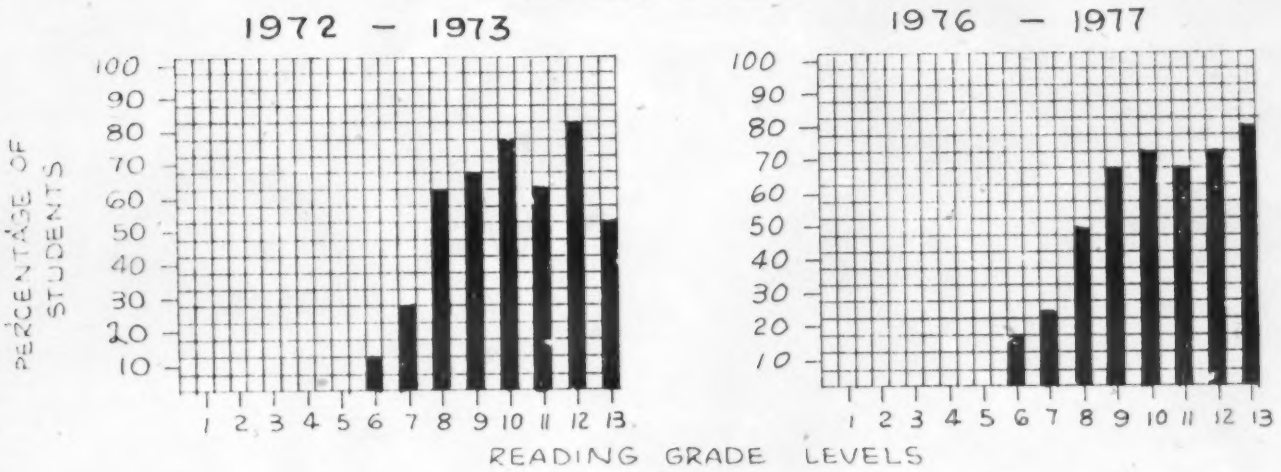
STUDENT SUCCESS AND PERSISTENCE

	1972/73					1976/77				
Reading Grade Levels	N	Reach Criteria	Do not Reach Criteria	With-draw	% of Success if Student Completes Course	N	Reach Criteria	Do not Reach Criteria	With-draw	% of Success if Student Completes Course
1	1			100%		1		100%		
2	0					0				
3	2		100%			1		100%		
4	1		100%			3		100%		
5	4		50%	50%		3		66.66%	33.33%	
6	10	10%	60%	30%		6	16.7%	66.7%	16.7%	
7	12	25%	25%	50%		31	22.58%	29%	48.4%	
8	20	60%	15%	25%		42	47.62%	23.81%	28.57%	
9	26	65.38%	15.38%	19.23%		29	65.52%	6.9%	27.59%	
10	30	76.67%	3.33%	20%		39	69.23%	5.13%	25.64%	
11	24	62.5%	0%	37.5%		3	66.66%	0%	33.33%	
12	11	81.82%	0%	18.18%		10	70%	0%	30%	
13	22	50%	4.55%	45.45%		9	77.78%		22.22%	
% of Total		55.83%	14.11%	30.06%	79.82%		50.85%	19.21%	29.94%	72.58%

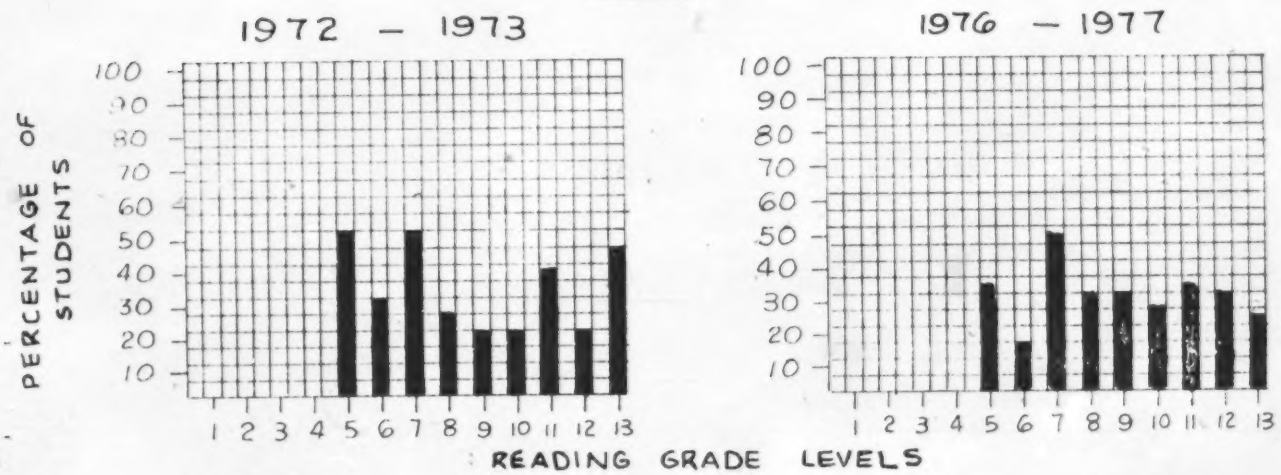
Do Not Reach Criterion Levels



Reach Criterion Levels



Withdraw



N = 168 for all 1972-73 figures

N = 208 for all 1976-77 figures

3) Chances of meeting the criteria improve through ninth-grade level. At seventh-grade level the chances are 25-30%. At eighth-grade level the chances are 50-60%. At ninth-grade level the chances are 70%.

4) Almost all students who begin with a tenth-grade level and above are successful if they finish the course. They improve at least two of their pre-test scores.

5) Most students reach the criterion (pass the course) if they persist. That percentage has dropped from 79.82% in 1972/73 to 72.58% in 1976/77. The decrease may be due to the greater number of students beginning with lower initial reading levels.

6) The withdrawal rate has remained quite stable. The students with reading scores at the extremes drop out more often. The students at the lower end may drop out because they think their chances of success are slim--a realistic assumption. Those at the high end may decide their reading is fine and they don't need the course--another realistic assumption.

7) Students reading at seventh-grade level and below will probably need to work longer than 16 weeks to meet the tenth-grade criterion.

8) Students with beginning reading scores of eighth grade through college level are highly successful at improving their scores on a standardized reading test after 16 weeks of instruction.

It was mentioned that more handicapped students and students learning English as a second language are entering community colleges throughout the country. That is also happening at Mott Community College. Although the college has no statistics on the total number of those students, the percentage of handicapped students in Reading classes has tripled in the past five years. They comprised 2.45% (N = 4) of the total Reading enrollment in

1972/73 and 6.75% (N = 14) in 1977/78. There were no non-native reading students in 1972/73; in 1977/78 there were ten. The average reading level of the handicapped students was 4.25. The average reading level of the students learning English as a second language was 6.8.

Overall gains, as measured by standardized tests are delineated in Tables 7, 8, 9, and 10.

TABLE 7

OVERALL GAINS IN A 16-WEEK COURSE FOR ENTERING STUDENTS READING BELOW COLLEGE LEVEL (REMEDIAL CLASSES) FALL 1972

	Vocabulary		Comprehension		Speed of Comprehension	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Mean Converted Scores	147.75	154.83	149.51	154.06	144.64	152.88
Mean gain in Converted Scores		+ 7.08		+ 4.55		+ 8.24
Mean Approximate Percentile Gain		+16		+20		+15
Approximate Grade-level Scores using Fiftieth Percentile as Referent	10	12	10	11.5	Below 9	12
Approximate Grade-level Gain		+ 2		+ 1.5		+ 3

N = 106
Test: Cooperative English Test: Reading Comprehension

TABLE 8

OVERALL GAINS IN A 16-WEEK COURSE FOR ENTERING STUDENTS
READING AT COLLEGE LEVEL
FALL 1972

	Vocabulary		Comprehension		Rate	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Mean Raw Scores	44.6	55.8	37.6	53.2	259.6wpm	453.8wpm
Mean Gain in Raw Scores		+11.2		+15.6		+194.2wpm
Mean Percentile Scores	45.4	65.2	46.0	82.0	52.0	95.2
Mean Percentile Gain		+19.8		+36.0		+43.2

N = 5
Test: Nelson-Denny Reading Test, Special Adult Norms

TABLE 9

OVERALL GAINS IN A 16-WEEK COURSE FOR ENTERING STUDENTS READING BELOW COLLEGE LEVEL (REMEDIAL CLASSES) FALL 1977

	Vocabulary		Comprehension		Speed of Comprehension	
	Pre-test	Post-test	Pre-test	Post test	Pre-test	Post-test
Mean Converted Scores	145.08	151.14	145.308	150.38	141.033	148.188
Mean Gain in Converted Scores		+6.06		+5.072		+7.154
Mean Approximate Percentile Gain		+9.5		+13.5		+9.0
Approximate Grade-level Scores using Fiftieth Percentile as Referent	9	11.4	9	11	Below 9	10.5
Approximate Grade-level Gain		+2.4		+2		+1.5 or more

N = 149
Test: Cooperative English Tests: Reading Comprehension

TABLE 10

OVERALL GAINS IN A 16-WEEK COURSE FOR ENTERING STUDENTS
READING AT COLLEGE LEVEL
FALL 1977

	Vocabulary		Comprehension		Rate	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Mean Raw Scores	33.272	41.727	32.545	41.636	241 wpm	428 wpm
Mean Gain in Raw Scores		+8.455		+9.09		187 wpm
Mean Percentile Scores	16	61	16	52	34	97
Mean Percentile Gain		+45		+36		+63

N = 11
Test: Nelson-Denny Reading Test, Special Adult Norms

CONCLUSIONS

1) The reading scores of students entering remedial reading classes in 1977 are lower than those entering in 1972. The mean of the approximate grade-level scores are 10.7 for 1972 and 9.9 for 1977.

2) The gains by students in remedial reading classes in each of those years are approximately two years overall. Mean gain in 1972 is 2.17 years. Mean gain in 1977 is 1.96.

3) Students who took college-level Reading courses generally entered Reading below mean (fiftieth percentile) on special adult norms.

After sixteen weeks of instruction, all percentile scores were above mean. In 1972 entering percentiles average 47.8; average exit percentiles are 80.8 with a gain of 33 percentile points. The 1977 entering percentile scores average 22; average exit percentiles are 70 with a gain of 48 percentile points.

4) College-level readers nearly doubled their reading speed. In 1972 students progressed from 194 words per minute to 454 words per minute. In 1977 the beginning rate averaged 187 words per minute and the exit rate averaged 428 words per minute.

5) Despite the declining reading scores of entering freshmen, those students continue to improve approximately two reading levels in a 16-week Reading course at Mott Community College.

6) Generally, students reading at college level when entering Mott Community College nearly double their reading rate and improve their vocabulary and comprehension scores substantially.

GENERALIZING FINDINGS

It was hypothesized that the mean average reading level of students in reading improvement over the past five years at Mott Community College has declined. That hypothesis proved correct and the amount of decline corresponds with the two-year decline reported in National Assessments over the past five years.

Although it is risky to generalize from local findings, these seem to agree with national trends. The profile of community college students here and throughout the country is changing. Their average age is increasing; they work while they're attending school and they take fewer credit hours per semester. They tend to come from poorer families and tend to be

ethnically varied. More handicapped students and non-native students are entering community colleges. Reading scores are declining. Here at Mott Community College, scores have declined from an average high school reading level to a junior high school reading level. Students are succeeding less often and withdrawing from college more often, but more people are entering college.

If indeed findings about community colleges and their students are ever to be helpful, there must be more research. Community colleges are numerous and growing in number and size. Basically, we know little about what is happening inside the "open door." Acquiring that information will require time and money. There is little evidence that it is now available.

LIST OF REFERENCES

Ahrendt, K. M. 1975. Community college reading programs. Delaware, N. J.: International Reading Assoc.

Alfred, R. L. and others. 1976. Profile characteristics of entering students, fall 1975, New York City Community College, Brooklyn, N. Y. ERIC ED128025

Astin, A. W. and Panas, R. J. 1969. The educational and vocational development of college dropouts. Washington, D. C.: American Council on Education

Balser, E. A. 1976. The relationship between text readability and student reading level and its effect on college achievement. (Ed.D. dissertation, W. Virginia Univ.)

Brown, J. I. 1973. Nelson-Denny Reading Test. Form C. Boston: Houghton-Mifflin

Causey, Oscar S. (ed.). 1955. What the colleges are doing in planning and improving college reading programs. Selections from the first, second and third yearbooks of the southwest reading conferences for colleges and universities. Fourth Yearbook of the Southwest Reading Conference for Colleges and Universities. Fort Worth, Texas: Texas Christian Univ. Press

Cooperative English tests: reading comprehension. 1960. Princeton, N. J.: Educational Testing Service

Cross, K. P. 1975. 1970 to 1974: years of change in community colleges. Findings, 2 (2)

EDL word clues self-placement guide. 1975. New York: McGraw-Hill

Emond, L. 1976. The status of remediation in American junior colleges (a study prepared at Dean Junior College, Franklin, Mass.) ED122264

Gonder, P. 1976. The good news in reading. pp. 14-17. American Education

Gordon, E. W. and Wilkerson, D. A. 1966. Compensatory education for the disadvantaged. N. Y.: College Entrance Examination Board

Henard, K. F. and Stenning, W. F. 1976. Life change and reading achievement as predictors of academic performance for selected community college freshmen. Paper presented at annual meeting of American Educational Research Assoc., San Francisco, Calif.

Kerstiens, G. 1975. The new learners: focus for the future. The keynote address at the Annual Conference of the Western College Reading Assoc., Anaheim, Calif. ED117680

Levin, Bernard H. and others. 1976. The Nelson-Denny Reading Test as a predictor of community college English and psychology grades. ERIC ED 129 358

Medsker, L. L. and Tillery, D. 1971. Breaking the Access Barriers: a profile of two-year colleges. N. Y.: McGraw-Hill

Moore, W. Jr. 1970. Against the Odds. San Francisco: Jossey-Bass

National Assessment of Educational Progress. 1976. Reading in America: a Perspective on two Assessments. Denver, Colo

Oldenfendt, S. J. 1976. Highlights and trends from national assessment: changes in reading achievement, 1970-1975. Report presented at the annual meeting of the American Educational Research Assoc., San Francisco, Calif.

Roueche, J. E. and others. 1976. Time as the variable, achievement as the constant: competency-based instruction in the community college. Horizons Issues, Monograph Series, AACJC. Washington, D. C.: National Institute of Education

Roueche, J. E. and Kirk, R. W. 1973. Catching up: remedial education. San Francisco: Jossey-Bass

Schiavone, J. 1977. Effectiveness of remedial reading courses in upgrading the skills of underprepared students who entered Manhattan Community College under the open admissions policy (Ed.D. practicum, Nova Univ.) ED134284

Silvaroli, N. J. 1973. Classroom reading inventory (2nd ed.) Dubuque, Iowa: William C. Brown

UNIVERSITY OF CALIF.
LOS ANGELES

AUG 18 1978

CLEARINGHOUSE FOR
JUNIOR COLLEGES